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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/034,788	12/27/2001	Curtis E. Farrell	0437-A-269	1351

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EXAMINER

FOX, CHARLES A

ART UNIT	PAPER NUMBER
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3652

DATE MAILED: 10/06/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/034,788

Applicant(s)

FARRELL ET AL.

Examiner

Charles A. Fox

Art Unit

3652

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 December 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-33,5-10 and 12-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nichols et al. in view of Nichols et al. In regards to claims 1,3,8,13 and 16 Nichols et al. US 5,730,575 (herein Nichols '575) teaches a device for transferring wafers between cassettes comprising:

a support structure (14) for supporting 2 wafer cassettes;

a first registration feature (20) located in a fixed relationship to said support structure, and a second registration feature (22) located in a fixed relationship to said support structure;

a carriage mechanism (44) supported by and movable along a track mechanism (46,48) that is supported in a fixed manner relative to the support structure;

a first pushing member (34) for moving wafers from a first cassette to a second cassette. Nichols '575 does not teach a second wafer pushing member. Nichols et al. US 5,735,662 (herein Nichols '662) teaches a device for moving wafers from a cassette to a holding area and back to the cassette wherein the device has a first pushing mechanism (62) for moving the wafers in a first direction and a second pushing mechanism for pushing the wafers in a direction opposite said first direction and first and second elongated slots in a support structure(46) through which the first and

Art Unit: 3652

second pushing members extend upwards. It would have been obvious to one of ordinary skill in the art, at the time of invention to provide a second pushing mechanism as taught by Nichols '662 to the device taught by Nichols '575 in order to allow the device to operate in either direction without having to move the first and second wafers cassettes from one position to the other.

In regards to claim 5 Nichols '662 also teaches the device being made of a plastic material.

In regards to claim 6 Nichols '575 further teaches the track members are comprised of guide rods (46,48) that are cylindrical and parallel to said support structure and each other.

In regards to claim 7 Nichols '575 also teaches that the carriage has two holes through which the guide rods move to allow bi-directional movement of said carriage.

In regards to claim 9 Nichols '662 further teaches the first and second pushing members are mounted on a push/pull rod (80) that extends through a carriage (82) to which it is fixed.

In regards to claim 10 Nichols '662 also teaches that each of the pushing members comprises:

- a lower vertical portion connected to said center rod (80);
- a horizontal portion with a first end connected to said lower vertical portion;
- an upper vertical portion connected to a second end of said horizontal portion;
- wherein the 3 portions are of unitary construction.

Art Unit: 3652

In regards to claim 12 Nichols '575 also teaches the device as having 4 support legs (71-74) and that each of the track members is supported by two of said leg members.

In regards to claims 2 and 14 Nichols '575 teaches a method of moving wafers from one cassette to another comprising the steps of:

supporting a first wafer cassette adjacent to and in alignment with a second cassette, one of said cassettes containing wafers;

supporting a first wafer pushing member for selectively moving wafers from one cassette to the other;

operating a mechanism to move the wafers from the filled cassette and into the empty cassette. Nichols '575 does not teach the step of transferring the wafers with a second pushing member.

Nichols '662 teaches a method for transferring wafers comprising the steps of;

supporting a first wafer cassette and a means for holding a plurality of wafers;

supporting a first and a second pushing member;

operating the pushing elements to move wafers from the cassette into the holding means or operating the machine in reverse to move the wafers into the cassette. It would have been obvious to one of ordinary skill in the art, at the time of invention to modify the methods taught by Nichols '575 with the methods taught by Nichols '662 in order to move the wafers from either cassette to the other without having to reposition either of the cassettes during operations.

Art Unit: 3652

In regards to claim 15 it would have been obvious to one of ordinary skill in the art, at the time of invention to move the device taught by Nichols '575 and Nichols '662 such that the carriage was in a central position before removing the cassettes as one of the pushing members would remain in one of the cassettes if this was not done and one of the cassettes could not be removed.

Claims 4,11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nichols '575 and Nichols '662 as applied to claim 3 above, and further in view of De Luna, Jr. et al. Nichols '575 and Nichols '662 teach the limitations of claim 3 as above, they do not teach a handle being located on the carriage. De Luna, Jr. Et al. US 2002/0098067 teaches a device for transferring wafers from a first cassette to a second cassette with a handle (46) for moving a pushing member. It would have been obvious to one of ordinary skill in the art, at the time of invention to provide a handle as taught by De Luna, Jr. et al. on the device taught by Nichols '575 and Nichols '662 in order to allow the device to be moved in either direction from a central point by a single operator who does not have to shift positions.

In regards to claim 11 Nichols '575 further teaches an indicator plate (28) in the center of the support structure. It would have been obvious to one of ordinary skill in the art, at the time of invention to reference the center plate taught by Nichols '575 and Nichols '662 with the handle taught by De Luna, Jr. et al. to gage the relative position of the carriage in relation to the support structure.

Art Unit: 3652

The prior art made of record and not relied upon, but considered pertinent to applicant's disclosure is: Yap et al. 1993, Rodriguez 1999, Nichols et al. 2002 and Nichols et al. 2003.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles A. Fox whose telephone number is 703-605-4294. The examiner can normally be reached between 7:00-5:00 Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eileen D. Lillis can be reached at 703-308-3248. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1113.

CAF


EILEEN D. LILLIS
SUPERVISORY PATENT EXAMINER
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